IN THE CLAIMS

Kindly amend the claims as follow:

1. (Currently amended) A method for determining an exposure gap between a mask and a resist material wherein the resist material is exposed to an incident energy transmitted through exposure regions of the mask, comprising:

providing first gratings on one or more sides of a first structure defined by one or more first regions of the mask;

providing second gratings on one or more sides of a second structure defined by one or more second regions of the mask;

exposing said first and said second structures to the incident energy;

measuring a difference between a location in said first structure and a location in said second structure; and

determining the exposure gap from said difference;

wherein the first structure and the second structure is provided on the mask.

2. (Original) A method according to claim 1, further comprising:

using a mask writing tool to provide said first gratings and said second gratings.

3. (Original) A method according to claim 1, wherein providing said first gratings comprises: providing gratings on an edge of an internal box structure defined by said one or more first regions, and

wherein providing said second gratings comprises:

providing gratings on an edge of an external box structure defined by said one or more second regions located opposite from said adjacent edge of said internal box structure.

4. (Original) A method according to claim 1, wherein providing said first gratings

comprises: providing gratings on a pair of opposite edges of an internal box structure defined by said one or more first regions, and

wherein providing said second gratings comprises:

providing gratings on a first edge of said internal box structure and on a second edge of an external box structure defined by one of said second regions, said first and said second edge being located opposite from one another.

5. (Original) A method according to claim 1, wherein providing said first gratings comprises:

drawing a plurality of pattern lines having relatively thin width portions and relatively thicker finger projectile portions on a semiconductor resist material, said thin width portions and said finger projectile portions placed in an adjacent manner to form a comb-like pattern.

6. (Original) A method according to claim 1, wherein providing said second gratings comprises: drawing a plurality of pattern lines having relatively thin width portions and relatively thicker finger projectile portions on a semiconductor resist material, said thin width portions and said finger projectile portions placed in an adjacent manner to form a comb-like pattern.

7. (Original) A method according to claim 1, further comprising:

providing said first gratings and said second gratings to have the same pattern line widths.

8. (Original) A method according to claim 1, further comprising:

providing said first gratings and said second gratings to have different pattern line widths from one another.

9. (Currently amended) A method according to claim 1, wherein measuring said first and said second structures comprises:

measuring a difference between a center in ~~said~~ a first box structure and a center in ~~said~~ a second box structure.

10. (Original) A method-according to, claim 1, wherein determining the exposure gap from said difference comprises:

applying an empirical relationship between a given pattern line width, a given exposure gap, and a given line shortening effect to determine the exposure gap.

11. (Original) A method according to claim 10, comprising:

using an optical metrology tool to measure center line shifts of said first and said second structures.

12. (Original) A method according to claim 10, comprising:

using an alignment system of a proximity lithography exposure tool to measure center line shifts of said first and said second structures.

13. (Original) A method according to claim 1, wherein determining the exposure gap from said difference comprises:

exposing one or more test wafers to the incident energy, said one or more test wafers having different tool settings, said tool settings corresponding to one or more different exposure gaps;

measuring critical dimensions of said test wafers;

creating a calibration chart comparing said tool settings and said critical dimensions; and determining the exposure gap from said calibration chart.

14. (Currently amended) A wafer, for determining an exposure gap between a mask and a resist material wherein the resist material is exposed to an incident energy transmitted through exposure regions of the mask, comprising:

first gratings provided on one or more sides of a first structure defined by one or more

first regions of the mask;

second gratings provided on one or more sides of a second structure defined by one or more second regions of the mask,

wherein said first gratings and said second gratings are exposed to the incident energy, and

wherein a difference between a location in said first structure and a location in said second structure is measured to determine the exposure gap therefrom; and

wherein said first structure and said second structure is provided on the mask..

15. (Original) A wafer according to claim 14, wherein said first gratings are provided on an edge of an internal box structure defined by said one or more first regions, and

wherein said gratings are provided on an edge of an external box structure defined by said one or more second regions located opposite from said edge of said internal box structure.

16. (Original) A wafer according to claim 14, wherein said first gratings are provided on a pair of opposite edges of an internal box structure defined by said one or more first regions, and

wherein said second gratings are provided on a first edge of said internal box structure and on a second edge of an external box structure defined by one of said second regions, said first and said second edge being located opposite from one anther.

17. (Currently amended) A system for determining an exposure gap between a mask and a resist material wherein the resist material is exposed to an incident energy transmitted through exposure regions of the mask, comprising:

first device that provides first gratings on one or more sides of a first structure defined by one or more first regions of the mask and second gratings on one or more sides of a second structure defined by one or more second regions of the mask;

second device that measures a difference between a location in said first structure and a

location in said second structure before and after said first and said second structures have been exposed to the incident energy, and determines the exposure gap based on said difference and,

wherein said first structure and said second structure is provided on the mask..

18. (Original) A system according to claim 17, wherein said second device comprises:

device that exposes one or more test wafers to the incident energy, said one or more test wafers having different tool settings, said tool settings corresponding to one or more different exposure gaps;

device that measuring critical dimensions of said test wafers and creates a calibration chart comparing said tool settings and said critical dimensions; and

device that determines the exposure gap from said calibration chart.

19. (Currently amended) A ~~method~~ system according to claim 17, wherein said second device comprises:

device that applies an empirical relationship between a given pattern line width, a given exposure gap, and a given line shortening effect to determine the exposure gap.

20. (Currently amended) A ~~method~~ system according to claim 17, comprises:

device that uses an optical metrology tool to measure center line shifts of said first and said second structures.